Statement of Thomas C. Dorr, Under Secretary for Rural Development, before the House Agriculture Committee

Hearing on USDA's Role in the President's Advanced Energy Initiative

Mr. Chairman, it is a distinct pleasure for me to appear before you today to discuss USDA's role in our nation's energy strategy.

That role is significant. Agriculture has long been a major consumer of energy. It has more recently become a major producer as well. With oil at \$70 a barrel and expected to remain high, emerging technologies in both energy conservation and renewable energy production offer significant opportunities for higher profits, investment, jobs, and wealth creation in rural America. As the agency with lead responsibility for rural development issues, USDA has a major role to play in bringing these new technologies to market.

USDA's activities are, however, part of a much broader effort. The President's Advanced Energy Initiative (AEI) sets clear goals: developing better ways to fuel our cars and power our homes and businesses and reducing our dependence on imported oil. This effort is the responsibility of the Department of Energy. While not a direct recipient

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of the increased DOE research funding proposed by the AEI, USDA nonetheless supports these objectives in many ways.

USDA's role in national energy policy is in fact longstanding and varied.

- USDA has been in the electricity business since the 1930's. Today, USDA Rural Development's electric borrowers deliver 10 percent of the nation's kilowatt hours and serve 75 percent of the nation's landmass. We anticipate significant demand growth and are working with rural utilities to expand generation and transmission capabilities. We also work with rural utilities to apply the highest environmental and safety standards to this effort, and we look forward to the advances projected under the AEI in clean coal, nuclear, and renewable energy technologies for electrical generation.
- As a major provider of rural housing, USDA is committed to residential energy efficiency. Our new housing standards conform to HUD's high standards and our energy efficiency requirements for existing homes exceed market standards. On June 6, 2006, we announced the Home Energy Advantage program to provide certain low and moderate income families, who might not otherwise qualify for homeownership, additional incentive to purchase an energy efficient home. We also provide assistance to low- and very-low income rural homeowners for critical home improvements including weatherization, insulation, and new heating systems.

- USDA has supported ethanol for many years; as a t-shirt slogan might put it, we were ethanol before ethanol was cool. This commitment has contributed to the significant increases in production efficiencies achieved by the ethanol industry. It has also helped create the preexisting customer base and production and marketing infrastructure on which the current growth of the industry is based. USDA clearly has been instrumental in nurturing the industry to its present point of liftoff.
- More recently, the Farm Security and Rural Investment Act of 2002 created the Federal Biobased Products Preferred Procurement System, which USDA is implementing now. Up to 4,000 products have been identified for possible inclusion in this system and will be the subject of rulemakings over the next two years. Many of these biobased products can be used instead of petroleum-based products. The long-term potential for feedstock substitution is significant.
- The Farm Security and Rural Investment Act of 2002 also gave USDA Rural Development broad new authorities in the areas of biomass research, the commercialization of renewable energy technologies, and energy efficiency. From Fiscal Years 2001 through 2005 (including energy-related investments made through pre-2002 programs), USDA Rural Development invested more than \$356 million in 650 renewable energy and energy efficiency projects. Renewable energy technologies funded include biofuels, methane gas recovery, biomass, wind, solar,

and geothermal. The direct USDA investment in these projects leveraged more than \$1.26 billion in additional private funds.

Biofuels are leading this effort. From Fiscal Years 2001 through 2005, USDA Rural Development invested approximately \$107 million (leveraging an additional \$624 million in private funding) in 147 ethanol and biodiesel projects. This remains a high priority in the years ahead. Just last week, in fact, Secretary Johanns announced a grant and loan guarantee combination totaling \$3.75 million for a 10 million gallon per year biodiesel plant in Iowa – a 10 percent increase in the nation's biodiesel production base in just one plant. At the same time, Secretary Johanns and Secretary Bodman announced a joint USDA-Department of Energy renewable energy conference, which will be held October 10-12, 2006, in St. Louis, to create partnerships and strategies to accelerate the commercialization of renewable energy sources across the board.

The biofuels growth potential is high. U.S. consumption of ethanol last year reached nearly 4 billion gallons, more than doubling the level of 2000. The Energy Policy Act of 2005 established a Renewable Fuels Standard of 7.5 billion gallons per year by 2012, a goal which now seems likely to be reached well ahead of schedule. The President and Congress have also extended the ethanol tax incentive, doubled the size limitation for the small producer tax credit, and provided a tax credit of up to \$30,000 for the installation of clean fuel infrastructure, such as storage tanks and pumps.

Looking a bit further down the road, President Bush has proposed an accelerated program of research to make cellulosic ethanol cost competitive by 2012. When this is achieved, the production base for ethanol production will be multiplied many times over and will include feedstocks drawn from every region of the country. This is one of the most promising mid-term possibilities for displacing a large fraction of our imported oil, and it is therefore a research agenda to which the Administration is fully committed. While the Department of Energy has the lead R&D role, USDA also supports research on cellulosic ethanol through our biomass R&D program, and we coordinate closely with the Department of Energy to ensure that our activities are complementary.

The "other biofuel" – biodiesel – is in fact an old idea just now coming into its own. At the turn of the last century, Rudolph Diesel himself originally used peanut oil to power his engines – while Henry Ford powered his first car with ethanol – but cheap oil shelved that idea until now. Today, however, high cost oil has changed the equation. From two million gallons in 2000, biodiesel usage in the United States soared to 28 million gallons in 2004 and 91 million gallons in 2005 and is on track to double again in 2006.

Like ethanol, biodiesel is a domestic, value-added agricultural product offering exciting opportunities for investment and wealth creation in rural America. The Energy Policy Act of 2005 provided federal tax credits for biodiesel production. As we have done for many years with ethanol, USDA Rural Development supports the development of biodiesel production facilities through our Business and Cooperative programs.

Ethanol and biodiesel are simply two of many technologies in play for reducing oil use. Their impact, however, may be very substantial. One Department of Energy/USDA study suggests that biofuels could displace as much as 30 percent of current U.S. gasoline consumption, or up to 60 billion gallons a year, while still meeting our food and export goals. This would be a very significant contribution towards meeting the President's targets on transportation fuels.

Changing the ways we power our homes and businesses is another priority. Through our partnership with rural electric cooperatives and our support for renewable energy sources through our renewable energy program, USDA has an important role to play in commercializing new opportunities in this area as well.

- Since 2001, through our Rural Utilities programs, Value-Added Producer Grants, and Section 9006 programs, we have helped fund 130 wind, 22 solar, 4 geothermal, 2 hydrogen, and 11 hybrid projects.
- We have funded 92 anaerobic digesters and 7 landfill gas recovery systems,
   through five different Rural Development programs.
- We recognize that a kilowatt saved is as important as a kilowatt produced. From 2001 through 2005, we funded 168 energy efficiency projects through our High Energy Cost Grant and Section 9006 programs.

To sum up, rising oil and natural gas prices — painful as they are for American consumers — are opening the door to a wide range of alternative energy. It is clear that a new energy economy is being born. It is also clear that renewable fuels, many of them rural or agricultural based, will play a key role in this evolution.

Let me conclude, then, with three brief observations about the broader implications of these developments for rural America.

First, the changes we are facing are driven by fundamentals. Oil prices are high, not only in the United States but around the world. Sources of oil are becoming ever-more concentrated in unstable regions. At the same time, since the fall of the Berlin Wall in 1989, between two and three <a href="billion">billion</a> people have joined the world market system. China and India are achieving strong growth rates and have emerged as major oil importers. The world is a much more productive, prosperous, and competitive place than it was 20 or even 10 years ago.

The rising price of oil reflects these new realities. Oil will continue to fluctuate in the short term in response to market and political factors, but very few analysts expect a return to the very low prices to which we have been historically accustomed.

Secondly, it is useful to remember that since the beginning of the industrial age, America's energy economy has not been static. From the mid-19<sup>th</sup> through the late 20<sup>th</sup> century, for example, earlier generations of Americans transitioned from animal, wind,

wood, and water power to coal, oil, natural gas, and nuclear. The challenges we are facing today are neither unique — the rest of the world faces them as well —nor unprecedented. We have managed such transitions before, and we will do so again.

Finally, from the vantage point of USDA Rural Development, the emergence of a viable market for renewable energy represents an historic opportunity for job and wealth creation in rural America. Ethanol, biodiesel, wind, and solar are distributed resources.

Small and mid-sized producers are able to compete. We are acutely interested, therefore, in focusing our resources on products that encourage a high degree of local ownership and control.

The scale of this opportunity is enormous. Displacing a billion barrels of imported oil at a current world oil price ranging around \$70 a barrel represents a savings to America's balance of payments of approximately \$70 billion dollars. That is an amount roughly equivalent to net farm income in the United States in the all-time record years of 2004-05 — and it significantly exceeds the long-term averages.

This is a remarkable opportunity for rural America and for our nation as a whole. The development of safe, domestically produced renewable energy is good for our national security. It is good for our economic competitiveness and balance of trade. It is good for the environment. And it is an unprecedented opportunity for creating ownership, wealth, and economic opportunity in rural America.

The President's energy policy supports all of these objectives. It is indeed a privilege for us at USDA Rural Development to support the President's vision. As the President has emphasized, America has a costly addiction to imported oil. But we can kick that addiction if we make up our minds to do so. The American free market system has an unmatched capacity to innovate, to create new technologies and markets, and to turn challenges into opportunities. That is what we are doing today. The United States will, in the long run, deal from strength, not weakness. This has been since 2001, and is still today, a core commitment of this Administration.

Thank you. That concludes my prepared statement. I will be happy to address any questions you may have.